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HOUSEKEEPERS' CHAT

Monday, August 6, 1934.

(FOR BROADCAST USE ONLY)

Subject: "A Blueberry Story." Information from the Bureau of Plant Industry and the Bureau of Home Economics, U.S.D.A.

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You've often heard of the lion tamer in the circus or the zoo. But have you ever heard of a berry tamer? Well, you may be interested to know that the U. S. Department of Agriculture at Washington has a most successful berry tamer -- Dr. Frederick Coville, who is responsible for taming the wild blueberry and developing those wonderful big blueberries you see on the market nowadays.

Dr. Coville says that his interest in blueberries started when he bought a farm up in New Hampshire. It had a pasture filled with wild blueberries, both the lowbush and the highbush kinds. Right away he noticed the difference in the flavor and the size of these two varieties of wild blueberries. That was back about 1906. And Dr. Coville soon started growing blueberry seedlings. His New Hampshire neighbors warned him then and there that he would never be able to domesticate the blueberry. They said it was one of those wild plants that nature meant to stay wild. And he soon discovered that they were partly right. For blueberry plants die in ordinary fertile garden soil. It was two years before Dr. Coville discovered that the blueberry has to have an acid soil and thrives best in a mixture of peat and sand.

Then he set out to learn why this plant needed an acid soil. The answer proved to be a minute fungus, visible only under a powerful microscope, that every healthy blueberry bush has on its roots. This root fungus is helpful. Apparently it supplies the bush with nitrogenous food. At any rate, the bush seems unable to nourish itself properly without the aid of the fungus.

Well, these early discoveries were the beginning of Dr. Coville's thirty-year series of experiments which finally produced from the little wild berries the beautiful large luscious blueberries that we can buy nowadays in the markets in many parts of the country.

Dr. Coville says that about this point in the story somebody is sure to ask the difference between blueberries and huckleberries. So here's his answer. Many people in the South and West use the name huckleberry for both berries. But strictly speaking, the huckleberry is the bluish berry with the hard seeds. If you cut one across the middle, you'll see ten large seeds in a ring, each with a bony shell that crackles between the teeth. The blueberry, on the other hand, has many seeds, but they're tiny and not hard, so many people believe the blueberry is seedless. The scientists in the Department of Agriculture use the name blueberry for their many new varieties which all seem practically seedless.

But to get back to the story of taming the wild blueberry. Dr. Coville says that the number of chromosomes in the berries had much to do with developing them. If you remember that word from your botany class, you'll recall that chromosomes are the minute bodies that carry the special characteristics inherited by a seedling from its parents. Some of the species of wild blueberry have 24 chromosomes. Others have 12. The scientists found that they could not cross the 12-chromosome species with the 24-chromosome species, but they had no trouble crossing the 24-chromosome species with each other. The lowbush blueberry and the highbush blueberry of the northeastern United States have 24 chromosomes.

Dr. Coville began the breeding in 1911 with selected wild plants of these two species. Since then, he and his co-workers have grown more than 60,000 pedigreed seedlings. And of that huge number, they have selected only twelve varieties. They've found only one out of every five thousand worthy of naming and recommending to blueberry growers. And they've rejected hundreds of plants that have berries as large as three-fourths of an inch in diameter, simply because the berries weren't up to their standard of flavor.

Last year one of the seedlings produced berries over an inch in diameter -- that's larger than a silver quarter. But the flavor was unsatisfactory. Now, the scientists are crossing that plant with some of their best-flavored varieties, in the hope of getting a one-inch blueberry with first-class flavor. Only last week Dr. Coville rejected two otherwise excellent hybrids because they had the flavor of a red raspberry instead of a blueberry.

People's tastes in blueberries differ a good deal. Some like a very tart berry that requires sugar if they're going to eat it with cream. Dr. Coville says he himself prefers a very sweet berry. The variety named Pioneer is that type of sweet berry. Stanley is another sweet variety. Katherine is a berry with the true wild blueberry flavor. It was bred from wild blueberries growing at Greenfield, New Hampshire. Then there's the Concord, named because the berries grow in clusters like bunches of Concord grapes. The Concord berry is too sour for most tastes until it is dead ripe. Then, it is mildly acid and most delicious. The Jersey berry came from New Jersey ancestors and is a very late and large variety. Sometimes the berries are seven-eighths of an inch in diameter.

Some of these hybrid blueberry bushes grow as tall as seven feet. The improved varieties were bred chiefly from the highbush berry. Other varieties, thos containing a quarter-strain of the lowbush blueberry are about four or five feet high.

And these big bushes have long, long lives. For all the scientists know now, they may live for a hundred years. If the tops are cut off or burned off, the roots will send up shoots and form a new plant. Blueberries require clean culture, acid fertilizers, and careful pruning every year. When the scientists first started the work, they thought that the plants would produce a paying crop every five or ten years. But they weren't optimistic enough. Many of the new varieties produce a fair crop the third year and a better crop the fourth year.

Most blueberry enthusiasts like their berries "as is" or with just sugar and milk or cream. Probably the most famous cooked blueberry dish is blueberry pie. Miss Ruth Van Deman at the Bureau of Home Economics says that the best blueberry concoction she knows anything about is a blueberry breadcrumb pudding, served at a famous old hotel in New Hampshire right at the foot of Mt. Monadnock, where acres and acres of these berries grow wild. Here's the way you make that easy and delicious blueberry pudding. Combine your blueberries with sugar -- about a quart of sugar to a quart of berries. Add a little water and put the berries on the stove to heat. When they've simmered about five minutes, add two cups of soft breadcrumbs mixed with about two tablespoons of butter. Then let the pudding stand on the back of the stove for about half an hour to give the crumbs and berries a chance to blend. Serve the pudding warm with plain or whipped cream. If the pudding doesn't seem tart enough, add a little lemon juice just before you bring it to the table.

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